

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) A method of obtaining  $^{68}\text{Ga}$  by:
  - (i) elution of a  $^{68}\text{Ge}/^{68}\text{Ga}$  generator to provide a supply of eluate containing  $^{68}\text{Ga}$ ;
  - (ii) contacting said the eluate from a  $^{68}\text{Ge}/^{68}\text{Ga}$  generator with an anion exchanger comprising  $\text{HCO}_3^-$  as counterions, so that the  $^{68}\text{Ga}$  from step (i) binds to said anion exchanger; and
  - (iii) eluting the bound  $^{68}\text{Ga}$  of step (ii) from said anion exchanger.
2. (Currently amended) The method according to claim 1 wherein the  $^{68}\text{Ge}/^{68}\text{Ga}$  generator of step (i) comprises a column comprising titanium dioxide.
3. (Currently amended) The method according to claim 1 wherein in step (i), 0.05 to 5 M HCl is used to elute  $^{68}\text{Ga}$  from the  $^{68}\text{Ge}/^{68}\text{Ga}$  generator.
4. (Currently amended) The method according to claim 2 wherein in step (i), 0.05 to 0.1 M HCl is used to elute  $^{68}\text{Ga}$  from the  $^{68}\text{Ge}/^{68}\text{Ga}$  generator.
5. (Currently amended) The method according to claim 1 wherein in step (iii), water is used to elute  $^{68}\text{Ga}$  from the anion exchanger.
6. (Currently amended) The method according to claim 1 wherein the anion exchanger is an anion exchanger comprising quaternary amine functional groups.
7. (Currently amended) The method according to claim 1 wherein the anion exchanger is an anion exchange resin based on polystyrene-divinylbenzene.

8. (Previously presented) Method of producing a  $^{68}\text{Ga}$ -radiolabelled complex by reacting  $^{68}\text{Ga}$  obtained by the method according to claim 1 with a chelating agent.
9. (Original) Method according to claim 8 wherein the chelating agent is a macrocyclic chelating agent.
10. (Previously presented) Method according to claim 8 wherein the chelating agent comprises hard donor atoms, preferably O and N.
11. (Previously presented) Method according to claim 8 wherein the chelating agent is a bifunctional chelating agent
12. (Original) Method according to claim 11 wherein the chelating agent is a bifunctional chelating agent comprising a targeting vector selected from the group consisting of proteins, glycoproteins, lipoproteins, polypeptides, glycopolypeptides, lipopolypeptides, peptides, glycopeptides, lipopeptides, carbohydrates, nucleic acids, oligonucleotides or a part, a fragment, a derivative or a complex of the aforesaid compounds and small organic molecules.
13. (Previously presented) Method according to claim 8 wherein the reaction is carried out using microwave activation.
14. (Previously presented) Method according to claim 8 for the production of  $^{68}\text{Ga}$ -radiolabelled PET tracers.
15. (Original) Kit for the preparation of  $^{68}\text{Ga}$  from a  $^{68}\text{Ge}/^{68}\text{Ga}$  generator, which comprises a generator column and a second column that comprises an anion exchanger comprising  $\text{HCO}_3^-$  as counterions.

16. (Original) Kit according to claim 15 further comprising means to couple the columns in series.
17. (Previously presented) Kit according to claim 15 further comprising aqueous HCl to elute the  $^{68}\text{Ga}$  from the generator column and/or water to elute the  $^{68}\text{Ga}$  from the anion exchanger column, preferably, the HCl and the water being aseptically and in a hermetically sealed container.
18. (Previously presented) Kit according to claim 15 further comprising a chelating agent, preferably a bifunctional chelating agent.
19. (Previously presented) A method of using a kit according to claim 18 for the production of  $^{68}\text{Ga}$ -radiolabelled PET tracers, comprising producing a  $^{68}\text{Ga}$ -radiolabelled complex by reacting  $^{68}\text{Ga}$  obtained by the method according to claim 1 with the chelating agent.